

### **ABSTRACT**

The present invention provides a new *Arabidopsis thaliana* nucleotide sequence and polypeptide sequence having a molecular weight of about 10.5 kDa.

Modulation of the expression of the polypeptides encoded by the nucleotide sequences according to the invention has an advantageous influence on plant cell division characteristics especially on the endoreduplication whereby plant cell size and storage capacity of plant cells is influenced.

Modulation of endoreduplication in a plant or part thereof may also be achieved by modifying expression or activity of E2Fa or E2Fa and DPa.